

This listing of claims will replace all prior versions, and listings, of claims in the application

LISTING OF CLAIMS

1. (currently amended) A circuit arrangement, comprising:

5 a transmission unit for inserting data belonging to at least two ~~one~~ terminal equipment types or services that are capable of including both voice and data type in a frame having a frame length, said transmission unit comprising an insertion mechanism for inserting said data ~~of a terminal equipment~~ of the at least two ~~one~~ terminal equipment types type, said data of all terminal equipment types being synchronously inserted into said frame and transmitted ~~with a transfer rate formed dependent on the frame length and number of bits arranged in the frame~~ with a digital time-division multiplex technique.

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15 2. (currently amended) A circuit arrangement, comprising:

a reception unit for dividing a datastream transmitted in a frame, said frame comprising data belonging to at least two terminal equipment types or services that are capable of including both voice and data, by a transmitter to at least one terminal equipment type of said at least two terminal equipment types; and

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a switch module for a purpose-conforming division of said datastream transmitted in said frame, in which a further division onto further terminal equipment of said at least two a terminal equipment types or services type is undertaken based on control data.

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3. (original) A circuit arrangement, comprising a transmission-reception unit which comprises said transmission unit of claim 1, and said reception unit of claim 2.

4. (currently amended) A method for transmitting a data stream in a frame belonging to at least two ~~one~~ terminal equipment types or services that are capable of including both voice and data type, comprising the steps of:

- 5 synchronously inserting data of said at least two ~~all~~ terminal equipment types or services into said frame in a first unit;
- transmitting said data ~~with a transfer rate formed dependent on a frame length and number of bits arranged in the frame~~ to a second unit with a time-division multiplex method; and
- 10 dividing said data stream in said frame to terminal devices of at least two ~~one~~ terminal equipment types or services type in said second unit.

5. (currently amended) A method according to claim 4, further comprising the step of depositing data for operational control of connections ~~a connection~~ to which
- 15 at least two ~~one~~ terminal equipment types or services that is capable of including both voice and data are is connected in a single ~~an~~ operating eoc channel of said frame.

6. (original) A method according to claim 5, wherein said connections are
- 20 telephony connections, ISDN connections or broadband connections.

7. (original) A method according to claim 4, further comprising the step of filling a payload data region available in a frame in a terminal equipment-specific manner depending on a transmission rate of a transmission link.

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8. (original) A method according to claim 4, further comprising the step of connecting a plurality of terminal equipment of at least one terminal equipment type to a transmission-reception unit.

5 9. (currently amended) A method according to claim 4, further comprising the steps of:

providing bits for operational control in said data belonging to said a terminal equipment types or services type; and

10 arranging said bits outside of a payload data region provided for said terminal equipment.

10. (original) A method according to claim 9, wherein said bits for operational control are arranged in an overhead of said frame.

15 11. (original) A method according to claim 10, further comprising the steps of:
allocating said bits for operational control to an operating eoc channel; and
addressing said bits for operational control via a sub-address in a message format of said operating channel.

20 12. (original) A method according to claim 4, further comprising the step of accepting data of a plurality of ISDN connections in said frame, said frame being a symmetric digital subscriber line frame.

25 13. (original) A method according to claim 4, further comprising the step of accepting data of a plurality of traditional telephony connections in said frame, said frame being a symmetric digital subscriber line frame.

14. (previously presented) A method according to claim 4, wherein said step of transmitting said data comprises transmitting said data of a symmetric digital subscriber line frame synchronously on a transmission link between said first unit, which is a network node, and said second unit, which is a network termination unit with a time-division multiplex method.

15. (cancelled).

16. (currently amended) A method for transmitting a data stream in a frame belonging to at least two ~~one~~ terminal equipment types or services that are capable of including both voice and data type, comprising the steps of:

synchronously inserting data of said at least two individual terminal equipment types or services into said frame in a first unit;

synchronously transmitting said data ~~with a transfer rate formed dependent on a frame length and number of bits arranged in the frame~~ to a second unit with a time-division multiplex method; and

dividing said data stream of said frame to terminal devices of at least two ~~one~~ terminal equipment types or services type in said second unit.

17. (new) A method for providing an ISDN service utilizing an SDSL frame, comprising:

providing voice channels and higher layer signaling of ISDN as a payload inside said SDSL frame;

providing ISDN specific eoc messages as an SDSL eoc that is not a part of the payload and is not multiplexed into timeslots; and

transmitting said SDSL frame from a transmitter to a receiver in order to
achieve a synchronous transfer without an ISDN physical layer.

18. (new) A method for providing a synchronous transfer of payload services
5 that include ISDN, voice and data over an SDSL communication link, comprising:
providing at least two payload services in a single SDSL frame;
providing a common overhead infrastructure that includes synchronization
and an eoc signaling channel for the SDSL frame, wherein the
assignment of the logic eoc channels between terminations is made
10 via addressing;
wherein the synchronization utilizes an SDSL clock.

19. (new) A method for providing a synchronous transfer of payload services
that include ISDN, voice and data over an SDSL communication link, comprising:
15 creating an SDSL sub-block that comprises an ISDN B-channel, an ISDN D-
channel, and further payload data;
combining multiple SDSL sub-blocks with SDSL overhead into an SDSL
payload block; and
transmitting multiple SDSL payload blocks from a sender to a receiver.

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20. (new) The method according to claim 1, wherein the frame further
comprises a single common embedded operating channel data block over the data
for the multiple terminal equipment types or services.

21. (new) The method according to claim 2, wherein the frame further comprises a single common embedded operating channel data block over the data for the multiple terminal equipment types or services.